

IL'SKIY, Aleksandr Longinovich, kand. tekhn.nauk. Priznaniya uchastnye:  
SUD, I.I., kand. tekhn. nauk; OSIPOV, K.G., kand. tekhn. nauk;  
NIKOLICH, A.S., inzh.; SEKOL'NIKOV, B.M., kand. tekhn. nauk;  
SKLOVSKIY, G.O., inzh., retsenzent; PETROVA, Ye.A., veduchshiy  
red.; POLOSINA, A.S., tekhn. red.

[Calculation and design of drilling equipment and tools] Raschet  
i konstruirovaniye burovogo obrudovaniya i instrumenta. Moskva,  
Gostoptekhnizdat, 1962. 636 p. (MIRA 15:12)  
(Boring machinery)

NIKOLICH, A.S.

Investigating the operation of the rod and piston packing of a drilling pump. Mash. i neft. obr. no.1:11-14 '65. (MIRA 18:4)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut neftyanogo mashinostroyeniya.

NAYMARK, B.A.; NIKOLICH, A.S.; SHVIKOVA, I.S.

Economic efficiency in the increase of the lifetime of the piston of a drill pump. Mash. i nef. obor. no.2:24-27 '65. (MIRA 13:5)

1. Gosudarstvennyy nauchno-issledovatel'skiy proyektnyy institut neftyanogo mashinostroyeniya.

YUGOSLAVIA/General and Special Zoology - Insects.

P.

Abs Jour : Ref Zhur - Biol., No 7, 1958, 30632

Author : Nikolich, C., Markovich, M.

Inst : -

Title : Lymantra monacha in the Federal People's Republic of Yugoslavia.

Orig Pub : Shumarstvo, 1957, 10, No 3-4, 242-245.

Abstract : No abstract.

Card 1/1

YUGOSLAVIA/Optics - Physical Optics

K-5

Abs Jour : Ref Zhur - Fizika, No 5, 1958, No 11709

Author : Nikolich, D.

Inst : Not Given

Title : Analogy Between the Laws of Radiation from an Absolutely Black Body and the Gas Laws.

Orig Pub : Vysn. Durshtva matem. i fiz. Nar. Nats. Srbije, 1955, 7, No 1-2, 85-98

Abstract : For cases of an ideal gas and the irradiation of an absolutely black body the author obtains general form of the thermodynamic expressions for the differential of entropy, and also the relations that generalize the Stefan-Boltzmann law and the adiabatic equation. In these expressions the light pressure plays the same role as the pressure of an ideal gas while the density of the electromagnetic energy corresponds to the density of an ideal gas. It is shown that the entropies of different systems can be related by functional equations. Bibliography, 8 titles.

Card : 1/1

**Working Experience of the Odessa  
Aerological Station**

S/050/60/000/06/10/021  
B007/B007

such a group is described. It is pointed out that an important factor is the altitude in which they carry out the sounding, and in this connection the preparation of the probing balloon later to be filled with hydrogen is described. In the course of recent years expert workers were trained. Thus, the aforementioned station had only four independent collaborators in 1958, but already 12 in the second half of the same year. The station has a magnetic recorder. In the second half of 1958 the station occupied first place in the USSR and was awarded the *Krasnoye Znamya Respublikanskogo komiteta soyusa aviarabotnikov i UGMS USSR (Red Banner of the Republican Committee of the Union of Aerological Technicians and the UGMS UkrSSR)*.

Card 2/2

NIKOLICH, L.

Sep 48

USSR/Chemistry - Systems, Binary  
Chemistry - Inorganic Compounds

"Binary Systems Composed of the Halides of Silicon, Titanium, Tin Arsenic, Antimony And Bismuth With Various Organic Compounds," N. A. Pushin, Collaborators: N. Vasovich, I. Velitskin, T. Voroponovoy, L. Marichem, L. Mikhaylovich, L. Nikolich, I. Parkhomenko, Ye. Ubovich, 8 pp

"Zhur Obshch Khimi" Vol XVIII, No 9

Investigates fusibility diagrams of 16 binary systems. Shows that arsenic trichloride with aniline and 1,3,4-xylidine gives high-melting compounds of composition  $AsCl_3 \cdot 3C_6H_5NH_2$  and  $AsCl_3 \cdot 3(CH_3)_2C_6H_3.NH_2$ . Stannic tetrachloride with o-nitranisole forms a compound of equimolecular composition,  $SnCl_4 \cdot O.C_6H_4(NO_2).O.CH_3$ . The remaining systems, except arsenic tribromide-asobenzene, are mechanical mixtures in the crystalline state. A second, modification of bismuth tribromide exists with transition temperature of  $151^\circ$ . Submitted 13 Jun 47.

PA 30/4975

Country : USSR  
Category : Farm Animals. Q-2  
Cattle.  
Abs. Jour : Ref Zhur-Biol., No 16, 1953, 74035  
Author : Pelomart, Ye.; Rusu, G.; Nikolichin, S.;\*  
Institut. : -  
Title : Raising of Young Cattle Stock with Rations  
Rich in Roughage and Juicy Fodder.  
Orig. Pub. : Mezhdunar. s.-kh. zh., 1957, No 1, 89-97  
Abstract : No abstract.

Card:

1/1

\*Sagin, F.; Krishan, T.; Dukar, A.;  
Marzheti, Y.

**NIDOLICH, K.:NORVATH, B.:NIDOLICH, K.**

**Basic solution of amniocentesis for prescription. Gygyaszony  
8 no. 1:13-16 Jan 1953. (GML 2):5)**

**1. Doctors. 2. Prepared by the 5/17th Pharmaceutical Laboratory.  
Szeged.**

**NIKOLICH, Karel, dr. cscadae as 1954. oct. 8-10-1 Gyagyszeres**  
~~-----~~ **Magyarorszag.**

**Current problems in the preparation of prescriptions. Gyagyszeres**  
**9 no.12:228-231 1 Dec 54.**  
**(PRESCRIPTIONS**  
**prep. of)**

NIKOLICS, Karoly; BIDLO, Gabor; NIKOLICS, Karolyne

Effect of solvents on the structure of crystals. Acta pharm.  
Hung. 35 no.4:152-157 1965.

DEMICHEV, V.F.; MATYUKHIN, V.D.; NEKOLOVORSKIY, A.V.; SIPUNOV, V.M.

Turning of a plasma stream in a magnetic field. Atom. energ.  
19 no.6:329-335 0 165. (MIRA 18111)

1 2000-00 ENF111 10/10/77 WA/T

ACC NR: AP6022031

SOURCE CODE: UR/0120/66/000/003/0198/0202

AUTHOR: Nikol'skiy, A. P.; Belitskiy, I. Z.; Protsenko, V. M.; Yevlanov, I. Ya;  
Nazarov, V. K.; Varenov, B. M.; Shmelev, V. I.; Kordonskiy, G. A.

2  
B

ORG: Central Laboratory of Automatics, OKChTsMET, Moscow (Tsentral'naya laboratoriya avtomatiki)

TITLE: Automatic fluorescent x-ray spectrometer

SOURCE: Pribory i tekhnika eksperimenta, no. 3, 1966, 198-202

TOPIC TAGS: automatic spectrometer, x ray spectrometer

ABSTRACT: A newly developed all-wave vacuum fluorescent automatic x-ray spectrometer is briefly described; intended for both qualitative and quantitative analyses, the two-beam spectrometer permits programing of 24 lines.

The programing unit has storages for these parameters: the Wulf-Bragg angle, discrimination threshold, discrimination-window width, standard or timer pulses, collimator type, sequence of interrogation of lines. These units are mentioned or described: x-ray optical system; primary and secondary collimators; crystal analysers (LiF and  $\text{NH}_4\text{H}_2\text{PO}_4$ ); radiation detectors (proportional and NaI(Tl) scintillation counters); amplifiers, supply packs, etc. The BKHV-6 x-ray tube (50 kv, 100 ma) permits exciting the K-series of elements with  $Z = 12-60$  and the L-series with  $Z > 60$ . Data regarding counting rates of pure elements is supplied. Orig. art. has: 3 figures and 1 table.

[03]

SUB CODE: 20, 09 / SUBM DATE: 14Apr65 / ORIG REF: 006 / OTH REF: 001

Card 1/1

UDC: 543.426

**NIKOLIN, A.I.**; **BELOV, A.F.**, kapitan-nastavnik; **VANLANOV, I.S.**, kapitan-nastavnik; **KOSMACHOV, I.K.**, kapitan-nastavnik; **SARATOV, V.F.**, kapitan-nastavnik; **SHCHONIN, M.I.**, kapitan-nastavnik; **BREMAN, A.A.**, kapitan; **DRUZHININ, A.V.**, kapitan; **IVANINA, B.F.**, kapitan; **POLE-TAYEV, L.A.**, kapitan; **VESHCHILOV, K.A.**; **VYKHODTSEV, P.K.**; **SMOLDYREV, A.Ye.**; **VERESHCHAGIN, Ya.A.**; **SUTYRIN, M.A.**; **SAVOSTIN, M.D.**; **FILYASOV, K.A.**; **GOLOVUSHKIN, M.F.**; **IVANOV, A.I.**; **FILYASOV, K.A.**, etv.za vypusk; **ALEKSEEV, V.I.**, red.isd-va; **YERMAKOVA, T.T.**, tekhn.red.

[Rules of navigation on R.S.F.S.R. inland waterways] Pravila plavanija po vnutrennim vodnym putiam SSSR. Vvedeny v deistvie s 1 marta 1959 g. prikazom ministra rechnogo flota no.28 ot 11 fevralia 1959 g. Moskva, Isd-vo "Machnoi transport," 1959. 124 p. (MIRA 13:6)

1. Russia (1917- R.S.F.S.R.) Ministerstvo rechnogo flota. 2. Glavnyy revizor po bezopasnosti sudokhodstva (for Nikolin). 3. Nachal'niki basseynovykh sudokhodnykh inspeksiy (for Veshchilov, Vykhodtsev, Smoldyrev). 4. Rabotniki Upravleniya glavnogo revizora po bezopasnosti sudokhodstva (for Vereshchagin, Sutyryn, Savostin, Filyasov). 5. Glavnoye upravleniye vodnykh putey i gidrotekhnicheskikh sooruzheniy (for Golovushkin).

(Inland navigation--Laws and regulations)

NIKOLIN, A. V.

Constant improvement of ship handling know-how. *Rech. transp.* 20 no.6:  
2-4 Jo 61. (MIRA 14:6)

1. Glavnyy revisor po bezopasnosti sudokhodstva i otkrane ob'yektov  
Ministerstva rechnogo flota.  
(Ship handling)

DEZELIC, M.; NIKOLIN, B.

See complex compounds of nicotine, and their insecticidal action.  
Glasnik hemisara 12:45-52 '63.

1. Laboratory of Organic Chemistry and Biochemistry, Chemical Institute,  
University of Sarajevo, Sarajevo.

## YUGOSLAVIA

**NIKOLIN, B., BOSKOVIC, B., and DEZELIC, M.,** Institutes of Chemistry and Pharmacology, Medical Faculty, Sarajevo

**"Acute Toxicity of Some Salts of Nicotine, Pyridine, and N-Methylpyrrolidine"**

Zagreb, Arhiv za Higijenu Rada i Toksikologiju, Vol 17, No 3, 1966, pp 303-308

**Abstract:** LD<sub>50</sub> of the salts of nicotine with gallic, 2,5-dihydroxybenzoic, oxalic, p-aminosalicylic, and p-nitrobenzoic acid, of N-methylpyrrolidine with gallic, 2,5-dihydroxybenzoic, oxalic, and p-nitrobenzoic acid, and also of pyridine oxalate and p-nitrobenzoate was determined in tests on mice in which intraperitoneal injection of the salts was carried out. Some of the salts tested had been newly synthesized at the Institute of Chemistry of the Medical Faculty at Sarajevo. It had been established that some organic acid salts of nicotine have insecticidal activity and are more resistant to oxidation than nicotine base. LD<sub>50</sub> of nicotine gallate, 2,5-dihydroxybenzoate, oxalate, and p-aminosalicylate was lower than that of nicotine base, while LD<sub>50</sub> of nicotine p-nitrobenzoate was higher. When injected subcutaneously into mice before administration of nicotine 2,5-dihydroxybenzoate, N-methylpyrrolidine gallate exerted a certain protective effect against poisoning with the nicotine salt. Tables, 12 references (6 Yugoslav, 6 Western). English summary. Manuscript received 6 Jul 65

1/1

ACCESSION NR: AP3006378

8/0126/63/016/002/025E/0259

AUTHORS: Ly\*ak, L. I.; Nikol\*in, B. I.

TITLE: Orientation of gamma-phase and epsilon-phase lattices during gamma-epsilon transformation in Fe-Mn alloys and in Fe-Mn-C steel

SOURCE: Fizika metallov i metallovedeniye, v. 16, no. 2, 1963, 256-259

TOPIC TAGS: Fe-Mn alloy, Fe-Mn-C steel, transformation, phase lattice orientation

ABSTRACT: The orientation of gamma-phase and epsilon-phase lattices during the  $\gamma \rightarrow \epsilon$  transformation in Fe-Mn-C steel had not been experimentally determined. The goal of this work was to supply this information and to verify the theoretical data of Z. Nishiyama (Kinsoku no Kenkyu, 1936, 13, 300) and the approximate experimental results of J. C. Farr (Acta Cryst., 1952, 5, 842). The composition of steel samples was: Fe+12% Mn and 0.5% C; that of the alloy: Fe+20% Mn. The phase orientations were determined from x-ray pictures of stationary samples produced in a rotation chamber at 2° intervals. The results obtained were used to construct polar diagrams for determining the gamma-phase and epsilon-phase orientation in steel. This was impossible to achieve by x-ray analysis alone because of the blending of the  $(311)_\gamma$  and  $(11\bar{2})_\epsilon$  diffraction spots. It was established that the

Card 1/2

ACCESSION NR: AP3006373

relation between the gamma-phase and epsilon-phase lattices was:

$(111)_\gamma \parallel (000)_\epsilon; (01\bar{1})_\gamma \parallel (11\bar{2})_\epsilon.$

This relation coincided entirely with that obtained by J. C. Farr. Only one of the possible four types of orientation (during the  $\gamma \rightarrow \epsilon$  transformation) was realized in steel monocrystals, while all four types appeared in the alloy. Orig. art. has 4 figures.

ASSOCIATION: Institut metalofiziki AN USSR (Institute of Physical Metallurgy AN UkrSSR)

SUBMITTED: 20Dec62

DATE ACQ: 27Sep63

ENCL: 00

SUB CODE: NL

NO REF SOV: 000

OTHER: 002

Card 2/2

LYSAK, L.I.; NIKOLIN, B.I.

Martensite phase with a laminated structure. Dokl. AN SSSR  
153 no.4:812-815 D '63. (MIRA 17:1)

1. Institut metallofiziki AN U.S.S.R. Predstavleno akademikom  
G.V. Kurdymovya.

LYSAK, L.I.; NIKOLIN, B.I.

Etch spirals on Fe-Mn-C steel. Sbor.nauch.trud. Inst. metallofiz.  
AN URSR no.19:232-234 '64; (MIRA 18:5)

LYSAK, L.I.; NIKOLIN, B.I.

Crystallostructural changes with martensitic transformations  
 $\gamma \rightarrow \epsilon \rightarrow \alpha$ . Sbor. nauch. trud. Inst. metallofiz. AN URSS  
no.20:154-164 '64. (MIRA 18:5)

ACCESSION NR: APL013091

2/0126/64/017/001/0010/0014

AUTHORS: Lyvsek, L. I.; Nikolin, B. I.TITLE: Studying packing defects and microhardness of  $\epsilon$ -phase in single crystals of Fe-Mn-C steel

SOURCE: Fizika metallov i metallov., v. 17, no. 1, 1964, 40-44

TOPIC TAGS: steel, Fe-Mn-C steel, steel single crystal, packing defect, microhardness, phase transformation, gamma-phase, epsilon-phase, gamma-to-epsilon transformation, x-ray diffraction pattern, U8 steel, St.3 steel

ABSTRACT: The  $\gamma$  to  $\epsilon$ -phase transformation in Fe-Mn-C steel single crystals has been studied microscopically and by x-ray diffraction patterns. Samples consisting of steels U8 and St.3 and of electrolytic manganese were produced in a high-frequency induction oven (their carbon content varied from 0.2 to 1.4% and their manganese content from 4 to 18%). The single crystals were grown by slow oven cooling of the melts. The rate of their growth strongly affected the amount of the  $\epsilon$ -phase which increased with the decrease in cooling velocity. The largest  $\epsilon$ -phase plates were formed in samples 0.5 to 1 mm thick. An analysis

Card 1/2

ACCESSION NR: APL013091

showed that during the  $\gamma \rightarrow \epsilon$  phase transformation in Fe-Mn-C steel some chaotic packing defects were formed. These are reflected in the blurring of  $\epsilon$ -phase points on the x-ray diffraction pattern and in the appearance of diffusive bands connecting some of the  $\gamma$ - and  $\epsilon$ -phase points. These packing defects appeared and disappeared together with the  $\epsilon$ -phase. The microhardness of the  $\epsilon$ -phase in the steel containing Fe + 0.1% C + 1.1% Mn was  $420 \text{ kg/mm}^2$  and the Meyer index was 1.73. Orig. art. has 5 figures.

ASSOCIATION: Institut metalofiziki AN SSSR (Institute of Metal Physics AN SSSR)

SUBMITTED: 15Jun63

DATE ACQ: 26Feb64

ENCL: 00

SUB CODE: NL

NO REF SOV: 007

OTHER: 013

Card 2/2

LYSAK, L.I.; NIKOLIN, B.I.

Studying the relief in  $\gamma \rightarrow \alpha$  transformations on single crystals of Fe-Mn-C steel. *Fiz. met. i metalloved.* 17 no.5:703-707 My '64.

Morphology and orientation of  $\alpha$ -martensite in single crystals of Fe-Mn-C steel. Part 3. *Ibid.*:708-713 (MIRA 17:9)

1. Institut metallofiziki AN SSSR.

L BC93-66 ENI(m)/ENI(d)/T/ENI(t)/ENI(a)/ENI(n)/ENI(c) 3  
 ACC NR: AP5027139 SOURCE CODE: UR/0126/65/020/004/0547/0554

AUTHOR: Lysak, L. I.; Nikolin, B. I.

ORG: Institute for the Physics of Metals AN UkrSSR (Institut metallofiziki AN UkrSSR)

TITLE: Packing defects in the martensite transition in steel

SOURCE: Fizika metallov i metallovedeniye, v. 20, no. 4, 1965, 547-554

TOPIC TAGS: martensite steel, phase transition, crystal lattice defect

ABSTRACT: The article considers the question of the role of packing defects in the formation of the martensite epsilon' and epsilon phases in iron-manganese-carbon steels. X-ray investigations of manganese steels (0-0.6% carbon, 8-18% manganese) showed the existence of a new martensite phase, the epsilon'-martensite phase. This phase has an 18-layer rhombohedral lattice with the parameters  $a = 12.56 \text{ \AA}$ ,  $\alpha = 110^\circ 40'$  (spatial group  $D_{3d}^2$ ), with hexagonal axes  $a = 2.53 \text{ \AA}$ ,  $c = 37.11 \text{ \AA}$ . X ray investigations show that the epsilon' phase has a closely packed structure of the I type (ABCABCBCACABCAB). A figure shows the changes in the crystal lattice in manganese steels with phase transitions, during heating and cooling. During cooling, the transitions are, successively, from the gamma, through the epsilon' and epsilon

UDC: 536.425

Card 1/2

L 8073-66

ACC NR: AP5027139

phases to the kappa' phase and, during heating, from the kappa' phase to the alpha, and kappa phases. It is proposed that in steels where the intermediate epsilon' and epsilon martensite phases are not formed, the paths for the displacement of the atoms during the transition from the gamma to the kappa' phase are the same as in steels where the epsilon' and epsilon phases are formed. The reason for this can be explained as follows. In the formation of a new phase, energy is required for the creation of a new interphase boundary. If the decrease in the free energy does not cover its increase in the bond with the formation of a new interphase boundary, then such a phase will not be formed. Alloying elements evidently decrease the free energy of the epsilon' and epsilon phases, but do not change the mechanism of the transition from the gamma to the kappa' phase. Orig. art. has: 5 figures.

SUB CODE: MM/ SUBM DATE: 28Oct64/ ORIG REF: 006/ OTH REF: 011

Card 2/2 (11)

NIKOLIN, G.I., Cand Med Sci -- (diss) "<sup>Experiences</sup>~~Experiences~~ in the  
treatment of the chronic forms of schizophrenia <sup>with</sup> intravenous  
~~administration~~ <sup>administration</sup> of pyromidon." L'vov, 1959, 15 pp (L'vov State Med  
Inst) 200 copies (KL, 34-59, 118)

- 102 -

*NIKOLIN, A. V.*

NIKOLIN, A. V.; CHIRCHIK, I. I., redaktor; MATVEYEVA, Ye. N., tekhnicheskiy redaktor

[Gauging horizontal cylindrical reservoirs; measurement tables]  
Kalibrovka gorizontaľnykh tsilindricheskikh rezervuarov; samerye tablitsy. Moskva, Gos. nauchno-tekhn. iss-vo mashinostroit. lit-ry, 1954. 77 p. (MIRA 8:4)  
(Gauging—Tables and ready reckoners)

AUTHOR: Nikolin, N.V. SOV/115-58-6-20/43

TITLE: Simplified Method for Calibrating Spheric-Ovaloid Bottoms  
(Uproshchennaya metodika kalibrovki sferoovaloidnykh dnishch)

PERIODICAL: Izmeritel'naya tekhnika, 1958, Nr 6, pp 43-48 (USSR)

ABSTRACT: The calculation of the capacity of spheric-ovaloid reservoir bottoms, i.e. of spheric bottoms with two radii of curvature, by trigonometric methods is very laborious. A simpler procedure has been proposed here, taking the ovaloid part of the bottom as a cylinder with its diameter equal to the inner diameter of the bottom. The spherical part is taken as a spheric segment with the bottom diameter as diameter, and the radius of the curvature minus the height of the ovaloid part as height. This simplification leads to a slightly larger volume than that calculated by trigonometry. Correcting coefficients, which are given in tables, must be introduced into the simplified formula. The height of a ~~modified~~ ovaloid

Card 1/2

NIKOLIN, N.V.

Plotting standard calibration tables for horizontal cylindrical  
tanks. Im.tekh. no.5:52-54 My '60. (MIRA 14:5)  
(Calibration)  
(Tanks)

NIKOLIE, N.V.

Combined calibration of horizontal tanks. Iss. toth. no. 12:  
51-52 D '60. (NIRA 13:11)  
(Calibration) (Tanks)

NIKOLIK, N.V., inzh.

Determining the capacity of horizontal cylindrical tanks having  
spheroid-ovaloid bottoms. Neft. i gas. prom. no.2:59-63 Ap-Je '62.  
(MIRA 15:6)

(Tanks)

NIKOLIN, N.V.

Differentiated norms for errors in measuring the quantity of petroleum products in horizontal tanks. Iss. tekhn. no. 7:43-45 JI '62.

(MIRA 15:6)

(Petroleum—Storage)

(Tanks--Measurement)

NIKOLIN, N.V.

Device for determining corrections for the inclination of  
horizontal reservoirs. Izv. tekhn. no.2:37-39 F '64. (MIRA 17:4)

NIKOLIN, R.I.; GRIN', N.P.

Treatment of pulmonary tuberculosis in mental patients. Vrach. delo  
no.10:1065-1067 0 '59. (NIRA 13:2)

1. Kafedra psikiatrii (sveduyushchiy - molusheyny deyatel' nanki,  
prof. Ye.V. Maslov) L'vovskogo meditsinskogo instituta i L'vovskaya  
Respublikanskaya psikhonevrologicheskaya bel'nitsa.  
(TUBERCULOSIS) (MENTALLY ILL)

KOROLEV, A.Y., *geruy inzhener.*; ~~POBOKHIN, R.V., *geruy inzhener.*~~; ~~NIKOLIN,~~  
~~V.I., *geruy inzhener.*~~

System of sublevel caving with greater sublevel interval. Ger.  
shur. no. 1:6-12 Ja '57. (NIRA 10:4)  
(Mining engineering)

DEMENT'YEV, I.V., inzh.; ZHERNAKOV, Yu.I., inzh.; NIKOLEV, V.I., inzh.;  
KOROLEV, A.N., inzh. [deceased]; TUMAKOV, V.A., inzh.

Using sublevel caving systems in pillar extraction. Desop. trade v  
prom. 2 no.3:13-14 Nr '58. (MIRA 11:3)

1. Institut UNIFROND'.  
(Copper mine and mining)

807/5240

PHASE I BOOK EXPIRATION

Abstracts sent 808. Well'sly fillal. Gaveo-geologically in-  
atwell.

Problems in the geology of the... (underground exploita-  
tion of ore deposits) (Sokolovskiy [1960] 165 p. (Series: 119;  
Study, sp. 59) 1,000 copies printed.

Material from: L. V. Buzarov, Professor, Institute of Technical  
Sciences; L. B. Zhuravskiy, Candidate of Technical Sciences; A. A.  
Ilyutskiy, Candidate of Technical Sciences. M. of Publishing  
House: L. S. Zhuravskiy; Book. No. 1. P. S. Zhuravskiy.

Abstract: This publication is intended for engineering and technical  
personnel in the mining industry.

Comments: This is a collection of 22 articles by different authors  
on problems of underground exploitation of large massive ore de-  
posits in the Urals. The articles are based on studies carried  
out in the Laboratory for the Exploitation of Ore Deposits of the  
Goreo-geologically Institute (Institute of Mining  
Geology, Ural Branch of USSR), between 1928-1929. The personalities  
are mentioned. Most of the articles are accompanied by references.  
SUMMARY OF UNDERGROUND EXPLOITATION

Alchibergskiy, I. G. On Inducing the Volume of Drainage Dumps in  
Shall Mines 53

Alchibergskiy, I. G. Shaft Drainage Pump With Vertical Well-Type  
Water Lift 59

Bratkovskiy, V. P. New Methods of Overland Stopping (Perridge  
Process) 65

Chernykh, L. M., and L. A. Zhuravskiy. Comparison of the System of  
Block Leveling with the Combined System Under the Conditions  
of the Urals 73

Zhuravskiy, L. M., and L. A. Zhuravskiy. Selective and Total  
Intersection of Upper and Lower Ores of the Shtyrburgskoye Deposit 85

Zhuravskiy, L. M., and L. A. Zhuravskiy. Analysis of Labor Input in  
Block Leveling at the Shtyrburgskoye Mine 91

Zhuravskiy, L. M., and L. A. Zhuravskiy. Improvement of In-  
stant Air-Explosion at the Shtyrburgskoye Mine 103

Zhuravskiy, A. I. Practice in Exploiting Thin Ore Sections of the  
Shtyrburgskoye Deposit 111

Zhuravskiy, A. I. On the Transition Boundary From Mining to Pit  
Intersection in Exploiting Deposits of Massive Ores 119

Zhuravskiy, A. I. On the Influence of the Coefficient of Loading on  
the Effect of Explosion in Steps Cutting 121

Zhuravskiy, L. A. Towards a Study of the Seismic Effect of Strong Ex-  
plosions 125

Zhuravskiy, V. I. Evaluating the Different Methods of Forming  
Blasts in the Faces of (Number) Blocks 131

Zhuravskiy, V. I., L. M. Zhuravskiy, V. P. Zhuravskiy, L. A.  
Zhuravskiy, and L. A. Zhuravskiy. Use of Underground Intersectors at  
Shtyrburgskoye Mine 137

Zhuravskiy, V. A. Evaluating the Force of Explosion and the  
Use of Gun Blasts for Transporting Crushed Ore in Exploiting  
Massive Deposits 149

Zhuravskiy, V. A. Evaluating Methods of Delivering Crushed Ore  
in Exploiting Massive Deposits 159

Abstracts: Library of Congress

Card 6/6

ILIVITSKIY, A.A.; NIKOLIN, V.I.

Determination of temporary resistance to compression on  
irregularly shaped specimens. *Trudy Gosgeol. Inst. SVAN SSSR*  
no. 54:21-24 '60. \* (MIRA 14:6)

(Rocks-Testing)

NIKOLIN, V.I.

Measuring stresses in rock massifs. Trudy Geol.-geol.inst. UZAN  
SER no. 5443-50 '60. (NIRA 1406)  
(Rock pressure) (Strain gauges)

NIKOLIN, V.I.

Design of mine bottoms in systems with mass breaking of ore. Trudy  
Gor.-geol.inst.WAN SSSR no.54,72-78 '60. (MIRA 14:6)  
(Mining engineering)

NIKOLIN, V. I., Cand. Tech. Sci. (diss) "Determination of Optimal Parameters for Design of Bottoms [dniehoh] for Systems with Mass Breaking of Hard Ores, (According to Strength Conditions)," Magnitogorsk, 1961, 18 pp. (Magnitogorsk Mining-Metallurgical Inst.) 120 copies (KL Supp 12-61, 271).

ILIVITSKIY, A.A., kand.tekhn.nauk; NIKOLIN, V.I., gorn.inzh.

Determining rock strength on samples with an irregular shape.  
Ugol' 36 no.1:34-36 Ja '61. (MIRA 14:1)  
(Rocks—Testing)

ILIVITSKIY, A.A., kand. tekhn. nauk; NIKOLIN, V.I., gornyy inzh.

Last effect of loads on magnetite. Gor. zhur. no.3:79-80 Nr '62.  
(MIRA 15:7)

1. Gorno-geologicheskiy institut Ural'skogo filiala AN SSSR,  
Sverdlovsk.

(Sverdlovsk Province—Magnetite—Testing)

NIKOLIN, V.I. (Donetsk)

Effect of the speed of stress application on the value of the  
temporary resistance of rocks to compression. Izv. AN SSSR.  
Mat. 1 gor. delo no.5:167-168 9-0 '63. (MIRA 16:11)

NIKOLIN, V.I.; ILIVITSKIY, A.A.

Rock bumps. Vop. gor. davl. no.17:50-54 '63. (MIRA 18:9)

1. Institut gornogo dela Ural'skogo filiala AN SSSR.

NIKOLIN, V.I.

Strength of certain sedimentary rocks at high temperatures. Ref.  
khoz. 42 no.2:14-16 F '64. (MIRA 17:3)

NIKOLIN, V.I.; LYSIKOV, B.A.

Effect of the depth of occurrence of rocks in the Donets Basin on  
their physical and mechanical properties. Ugel' 39 no.12:26-29  
D '64. (MIRA 18:2)

1. Makeyevskiy nauchno-issledovatel'skiy institut po besopasnosti  
truda v gornoy promyshlennosti.

NIKOLIN, V.I., kand. tekhn. nauk; BERKOVICH, I.M., inzh.

Preliminary wetting is a preventive method for sudden outbursts of rock.  
Shakht. stroi. 9 no.2:6-8 F '65. (MIRA 184)

1, Makeyevskiy nauchno-issledovatel'skiy institut po bezopasnosti  
rabot v gornoy promyshlennosti (for N'kolin). 2. Shakhtostroitel'-  
noye upravleniya No.5 tresta Makeyevshakhtostroy (for Berkovich).

NIKOLIN, V.I., kand. tekhn. nauk; LYSEKOV, B.A., inzh.; SVERZHEVSKIY, V.L.,  
inzh.

Strength properties of sandstone at great depths. Snakht. stroi.  
9 no.3:15-17 Mr '65. (MIRA 18:7)

1. Makeyevskiy nauchno-issledovatel'skiy institut po bezopasnosti  
rabot v gornoy promyshlennosti (for Nikolin). 2. Donetskij poli-  
tekhnicheskij institut (for Lysekov). 3. Treest Artengeologiya  
(for Sverzhevskiy).

NIKOLIN, V.I.; KALYUZHNIK, B.N.

Determination of the tensile strength of resin by the method of  
splitting the core sample. *Voprosy inzh. nauk* 22:5-67 (1966)  
(MIRA 1816)

NIKOLIN, V.I.

Existence of residual stresses of the first kind in ejection-active sandstones. Fiz.-tekh. probl. razrab. pol. iskop. no.4: 25-29 '65. (MIRA 19:1)

1. Makeyevskiy nauchno-issledovatel'skiy institut po bezopasnosti rabot v gornoy promyshlennosti (MakNII). Submitted March 9, 1965.

(W) L 13021-66 ENT(d)/ENT(m)/ENP(w)/ENP(v)/T/ENP(t)/ENP(k)/ENP(h)/ENP(b)/ENP(l)

ACC NR: AP5028367 SOURCE CODE: UR/0369/65/001/005/0531/0534

IJP(e) JD/WD/EM

AUTHOR: Nikolin, Ye. S.; Karpenko, G.V.

ORG: Physics-engineering Institute, AN UkrSSR, L'vov (Fiziko-mekhanicheskiy institut AN UkrSSR)

TITLE: The effect of load frequency on the corrosion-fatigue strength of carbon steel

SOURCE: Fiziko-khimicheskaya mekhanika materialov, v. 1, no. 5, 1965, 531-534

TOPIC TAGS: carbon steel, corrosion, fatigue strength, corrosion resistant steel, MECHANICAL FATIGUE, DEFORMATION RATE

ABSTRACT: In order to clarify the effect of load frequency on the corrosion-fatigue processes under prolonged test conditions, the authors conducted tests of rotating steel specimens (7.52 mm in diam.) in air and in a medium simulating sea water (3% solution of NaCl), at frequencies of 25, 50, 80, and 160 cps. The tests lasted up to 600 hr on modified MUI-6000 and MVP-10000 machines. Standard specimens were treated by procedures producing minimal variations in the structure of the subsurface layer. It is found that at high amplitudes of load, i.e., at short-term periods in the medium, a high corrosion-fatigue strength of the steel is observed in cases of high frequency changes in the

Card 1/2

L 1302-66

ACC NR: AP5028367

load, which agrees with the widely held views on the effect of frequency. When the load amplitude is lowered to values appreciably increasing the time to failure, an inverse effect of the frequency on the corrosion-fatigue strength of steel is observed. In this case, at high frequencies the corrosion-fatigue strength is lower than that at lower frequencies. The investigation conducted verifies the assumption that the corrosion-fatigue process intensifies with rising frequencies, which is attributed to the considerable activation of the metal in the electrochemical corrosion process: the interaction of the metal with the medium increases with increasing frequency in stress variation, i.e., with an increase in the rate of deformation. Orig. art. has: 2 figures.

SUB CODE: 11 / SUBM DATE: 16May65 / ORIG REF: 002 / GTH REF: 002

2/2

Card

NIKOLINA, ~~V. Ya.~~  
V. Ya.

3

✓ Sodium Sulfate (Sulfate salts): A. I. GORODNITSKY AND I.  
YA. NIKOLINA. *Geokhimiya*, 1954, 2:1 pp. Franc. R. 777.  
Reviewed in *Zhur. Priklad. Khim.*, 28 (1956) 1061 (1956). This  
first monograph on sodium sulfate covers physical and chemical char-  
acteristics, most important deposits and methods of working,  
methods of dehydrating mirabilite, and the industrial process for  
making sodium sulfate. Considerable space is given to the con-  
version of sodium sulfate into sodium sulfide, soda, caustic soda,  
etc. Detailed bibliography. H Z K

①

Jim Jack

AID P - 3736

Subject : USSR/Chemistry  
Card 1/1 Pub. 152 - 16/16  
Authors : Kaganovich, Yu. Ya. and B. A. Kopylev  
Title : Gorbanev, A. I. and V. Ya. Nikolina. Sul'fat natriya.  
(Sodium sulfate) Goskhimizdat, 1954 (Book review)  
Periodical : Zhur. prikl. khim. 28, 8, 906-908, 1955  
Abstract : Critical review.  
Institution : None  
Submitted : No date

NIKOLINA, V.Ya.; NEYMARK, I.Ye.; FIOYTKOVSKAYA, N.A.

Molecular sieves (preparation, properties, applications).  
Usp. khim. 29 no.9:1088-1111 8 '60. (NINA 13:9)

1. Institut Fizicheskoy khimii AN USSR i Nauchno-issledovatel'skiy institut osnovnoy khimii.  
(Sorbents) (Zeolites)

33442

S/064/62/000/001/005/008  
B110/B138

15 9/30 also 1087

AUTHOR: Nikolina, Y. Ya.

TITLE: Production of highly disperse silicon dioxide

PERIODICAL: Khimicheskaya promyshlennost', no. 1, 1962, 48 - 52

TEXT: The author tests a new method for the production of "Aerosil" which is used as a filler. The reaction is  $\text{SiCl}_4 + 2\text{H}_2\text{O} = \text{SiO}_2 + 4\text{HCl}$  and in this work Shebelinsk natural gas (97.8%  $\text{CH}_4$ ; 0.3%  $\text{H}_2$ ; 0.15%  $\text{O}_2$ ; 0.05%  $\text{C}_2\text{H}_6$ ;  $\text{CO}$  traces; 1.7% inert gases) replaces the hydrogen. With an  $\text{O}_2$  excess of ~30%, the initial  $\text{CH}_4$  concentration was ~7.5%. Composition of the reaction gas was 8.8%  $\text{HCl}$ ; 8.8%  $\text{H}_2\text{O}$ ; 4.3%  $\text{O}_2$ ; 7.4%  $\text{CO}_2$ ; 70.7%  $\text{H}_2$  volume. Air and natural gas pass via mixer 1 (Fig.) to gas burner 2 at the top of heat-resistant steel reaction furnace 3. 10 - 15% of the total volume of air avoids the mixer, passing direct to the  $\text{SiCl}_4$  evaporator 4 and thence, with  $\text{SiCl}_4$  vapors, to the center of the gas flame. The  $\text{SiCl}_4$

Card 1/0 4

33442

S/064/62/000/001/005/008  
B110/B138

Production of highly disperse...

concentration can be regulated via the relative volume of air supplied to 4. The gas is ignited by a nichrome filament (5), and temperature is measured on a chromel-alumel thermocouple. After 4 - 5 sec, the gas mixture passes through spiral 7 and trap 8 where  $\text{SiO}_2$  is filtered off with glass fabric 9, then through a system for  $\text{HCl}$  absorption, from which it is removed by jet pump. The gases must be dry,  $\text{SiCl}_4$  must contain no refractory impurities such as silicon polychlorides, and all units of the apparatus must be heat insulated and provided with heating coils.  $\text{SiCl}_4$  consumption is determined from liquid level in 4, and the ratio air :  $\text{CH}_4$  :  $\text{SiCl}_4$  was controlled from flow meter readings. The specific surface of the final product was determined from the adsorption of phenol from the heptane solution and from  $\text{H}_2$  adsorption at  $-196^\circ\text{C}$ . The pH of an aqueous  $\text{SiO}_2$  suspension was used as acidity index. The inner surface of the furnace was insulated by the  $\text{SiO}_2$  layer formed. In nine experiments between 793 and 930°C at a rate of ~10 liters/min, best results (89.9% yield; 267  $\text{m}^2/\text{g}$  specific surface) were obtained at 930°C,  $\text{SiCl}_4$

Card 2/0 4

33442  
S/064/62/000/001/005/008  
B110/B138

Production of highly disperse...

concentration: 181.0 g/m<sup>3</sup>, CH<sub>4</sub> concentration: 7.5%; water excess was 189%. Yield and specific surface increase with the temperature. At 900°C, water excess may be <200%; the SiCl<sub>4</sub> excess can be reduced by 5 - 10% by preliminary stirring and the H<sub>2</sub>O excess by 100 - 150%. Partial replacement of air by oxygen increases the SiCl<sub>4</sub> and H<sub>2</sub>O concentrations. The maximum SiCl<sub>4</sub> concentration with an O<sub>2</sub> and H<sub>2</sub> excess of 30% and 150%, respectively, was calculated to be 930 g/m<sup>3</sup>. The required acidity (pH = 3.6 - 4.2) of a 4% aqueous aerosol suspension can be achieved by blowing with hot air (300 - 400°C), if necessary mixed with NH<sub>3</sub>. Concentrated hydrochloric acid may be obtained as a by-product. It is recommended that collecting devices should be made of a hot HCl-resistant Al alloy. The author thanks L. I. Kaysh and N. A. Dering for their assistance with experiments. There are 1 figure, 2 tables, and 26 references: 3 Soviet and 23 non-Soviet. The four most recent references to English-language publications read as follows: US Patent 2599687. US Patent 2798792. English Patent 726250. L. J. White, G. J. Duffy. Ind. X

Card 3/4 4

NIKOLINA, V.Ya.; KNYSH, L.I.; LERING, N.A.

Preparation of highly dispersed silicon dioxide by vapor-phase hydrolysis. [Trudy] NIOKHIM 15:64-75 '63.

(MIRA 12:2)

SECRET

CONFIDENTIAL

SECRET

CONFIDENTIAL

SECRET

CONFIDENTIAL

SECRET

CONFIDENTIAL

SECRET

CONFIDENTIAL

SECRET

CONFIDENTIAL

[The main body of the page contains extremely faint and illegible text, likely a document or report, which has been obscured by heavy noise and low contrast. Some faint markings are visible, including what appears to be a date '10, 25' on the right side.]

L. I. PIGUZOVA ET AL./I

ACC. NR. AP5024950

UR/0065/000/010/0032/0034  
543.54438  
13

AUTHOR: Piguzova, L. I.; Nikolina, V. Ya.; Dubinin, M. M.; Shishakova, T. A.

TITLE: Acid resistance of the synthetic zeolite erionite

SOURCE: Khimiya i tekhnologiya topliv i masel / No. 10, 1965, 32-34

TOPIC TAGS: zeolite, hydrochloric acid, gas adsorption, adsorption, desorption

ABSTRACT: Synthetic erionite, having the formula  $0.5K_2O \cdot 0.4Na_2O \cdot Al_2O_3 \cdot 6.6SiO_2 \cdot 5.5H_2O$ , was treated with solutions of hydrochloric acid of various concentrations for 1 hr at 96 — 98C. It was found that under drastic conditions (acid of pH 2.1 — 2.4), the structure of the zeolite remains preserved. No changes in the crystal lattice of the zeolite, even when treated with 0.1 N HCl, could be detected by x-ray structural analysis. The water adsorption capacity also changed very little. The synthetic zeolite in the H-form was studied under stationary conditions in the adsorption-desorption of an  $NO_2-N_2O_4$  gas mixture: after 8 adsorption cycles, no appreciable change in adsorption properties was observed. Very slight amounts of benzene adsorbed on synthetic erionite showed that its effective pore radius is about 5A. "The  $NO_2-N_2O_4$  adsorption-desorption experiments were carried out at the Kazan khimiko-tekhnologicheskii Institut im. S. M. Kirova (Kazan Chemical Engineering Institute) by E. B. Krasnyx and T. G. Musin, who used a technique which they developed." Orig. art. has: 5 figures and 1 table.

ASSOCIATION: VNII NP

Card 1/2

ACC NR: AP7005143 (N) SOURCE CODE: BU/0011/66/018/009/0799/0802

AUTHOR: Borissov, G.; Nikolinski, P.; Grigorova, M.; Mihallov, M.

ORG: Institute of Organic Chemistry, Bulgarian Academy of Sciences

TITLE: Phosphorus- and sulfur-containing polyurethanes

SOURCE: Bulgarska akademiya na naukite. Doklady, v. 19, no. 9, 1966, 799-802

TOPIC TAGS: polyurethane, oligomer, polymer, isocyanate, sulfide, esterification, precipitation, condensation, adhesion

ABSTRACT: A series of experiments were conducted to produce phosphorus- and sulfur-containing polyurethanes from oligomers by treating them with diisocyanates. Oligomers with active hydrogen atoms in their molecule were obtained by an interruption of the reaction of re-esterification of diethylphosphite with bis- $\beta$ -hydroxyethylpolysulphide. The experiments were carried out with and without a solvent. The substances used were: freshly distilled diethylphosphite; bis- $\beta$ -hydroxyethylpolysulphide synthesized by condensation of two-sodium tetrasulfide with ethylenechlorhydrin; and toluylenedisocyanate; tetrachlorethane served as

Card 1/2

ACC NR: AP7005143

a solvent. Different ratios between the phosphorus oligomer and toluylene-diisocyanate were used. Solid polymers resulted when the diisocyanate was equimolecular to the oligomer or was in excess. Polymers were obtained without a solvent from a mixture of bis- $\beta$ -hydroxyethylpolysulfide and oligomers treated with toluylenediisocyanate. The results of the experiments show that the dependence of the type of polymer on the ratio between the initial products is about equal, with or without a solvent. Examination with regard to combustibility and adhesion to metal surfaces showed that the products have self-quenching properties and good adhesion. The paper was presented by B. Kourtev, Corresponding Member of BAN, 3 May 1966. Orig. art. has: 1 diagram, 4 tables, and 2 formulas.

[KP]

SUB CODE: 11/SUBM DATE: 03May66/ORIG REF: 002/OTH REF: 002/

Card 2/2

NIKOLINSKI, P. D.

Nikolinski, P. D. - *Technologia na kauschuka. (Sofiya) Nauka i isustvo (1951)*  
Vol. 1, (The technology of rubber)

SO: Monthly List of East European Acquisitions, Library of Congress, Vol. 2, No. 9,  
Oct. 1953, uncl.



**NIKOLINSKI, PETRO**  
**YUGOSLAVIA/Chemical Technology. Chemical Products and Their Application.**  
**Crude Rubber, Natural and Synthetic. Vulcanized Rubber. K-31**

**Abs Jour:** Referat Khim-Khimiya, No 5, 1958, 16406.

**Author :** Nikolinski Petro, Genov Kostadin

**Inst :** Chemical-Technological Institute.

**Title :** Effect of Some Factors on Film Formation in Manufacturing of Seamless Rubber Articles.

**Orig Pub:** Godishnik Khim-tekhnol. in-t, 1958, 1, 43-58.

**Abstract:** A study was made of the effect of air humidity, pressure of solvent vapor and operation temperature, on blister formation during manufacturing of dipped articles from rubber solutions. Solvents having a boiling point of 60-80° cause a strong cooling of the film during evaporation and are suitable, therefore, for operation at temperatures below 20° and absolute humidity of less than 50%. Solvents with a boiling point of 80-120° are usable at 20° and absolute humidity of 80%. Solvents with

**Card :** 1/3

*NIKOLINSKI, F.*

**BULGARIA/Chemical Technology. Chemical Products and Their  
Application. Natural and Synthetic Caustichons.  
Rubber.**

E-31

**Abstr Jour: Ref. Zhur-Zhizniya, No 11, 1956, 30232.**

**Author : Nikolinski F, Ganev G.**

**Inst : Not given.**

**Title : Fixing of the Molecular Orientation in the Vulcaniza-  
tion of Rubber**

**Orig Pub: Gostekhnik Khim-tseluloz is-t, 1955 (1956), 2, No 2,  
137-149.**

**Abstract: The durability of vulcanization can be raised sub-  
stantially if the batches of the rubber mixture are  
first scoured and then stretched and vulcanized.  
The increase in durability is explained by orienta-  
tion, and by the subsequent fixation of the orientated**

**Card : 1/3**

*Handwritten text, possibly "P. B."*

SECRET

SECRET

SECRET

SECRET

NIKOLINSKI, P.

NIKOLINSKI, P. Liberation of acetylene and acetylene polymers from their gas mixtures by adsorption. p. 255. Vol. 3 1955  
IZVESTIYA. Sofia, Bulgaria

SOURCE: East European Accessions List (EEAL) Vol. 6, No. 4--April 1957

NIKOLINSKI, P.

KIKOLINSKI, P. New synthetic filmforming material for producing frost  
designs from higher acetylene polymers. p. 419 Vol. 3 1955  
IZVESTIYA. Sofia, Bulgaria

SOURCE: East European Accessions List (EEAL) Vol. 6, No. 4--April 1957

NIKOLINSKI, P.

NIKOLINSKI, P. Decomposition of acetylene and acetylene polymers by means of adsorption. p. 1. Vol. 4, no. 8, Dec. 1955. TEKHNIKA. Sofia, Bulgaria

SOURCE: East European Accessions List (EEAL) Vol 6, No. 4--April 1957

NIKOLINSKI, P.

"Contribution to the synthesis of chloroprene from acetylene."

CHEMICKY PRUMYSL, Praha, Czechoslovakia, Vol. 5, No. 10, October 1955.

Monthly List of East European Ac cessions (EFAI), LC, Vol. 8, No. 9, September 1959.

Unclassified.

**NIKOLINSKI, P.**

**Concerning the Separation of Acetylene and Acetylene Polymers through Adsorption. *TEKNIKA (Engineering)*, 7-8:1:Oct-Dec 55**

NIKOLIN SKI, F

Distr: 4E2e(j)/4E3b/4E3d

Preparation of nitroacetone...  
No. 2, 94-100 (1956) (Russian summary 100, German summary 109-10). Two methods were used to prep.  $CH_3C(NO_2)CH_2C$

5  
2 BW(BW/JW)  
1-JAS(NW)

$(NO_2)CH:CH_2$  (I). To 20 g. Na salt of  $CH_3CHCH_2NO_2$  (II) in 50 ml. MeOH 7 g. paraformaldehyde and 0.1 g. hydroquinone in 20 ml. MeOH was added with stirring, after 2 days at 20° the mixt. neutralized with 5 g. AcOH in 15 ml. Et<sub>2</sub>O, the ppt. filtered off, CH<sub>2</sub>O and II distd., and the remaining liquid treated with NaOEt in Et<sub>2</sub>O to give Na salt of  $CH_3CHCH(NO_2)CH_2OH$  (III); neutralization with dil. H<sub>2</sub>SO<sub>4</sub> yielded 16.32 g. III, b. 160-5°, n<sub>D</sub><sup>20</sup> 1.4330; acetate (IV), n<sub>D</sub><sup>20</sup> 1.4980. Dehydration of IV by the method of Haas and Vanderbilt (CA 34, 1304<sup>1</sup>) gave 50% I, b.p. 114-18°, n<sub>D</sub><sup>20</sup> 1.440. To 10 g. NaOMe in 75 ml. Et<sub>2</sub>O 20 g. MeCH(OH)CH<sub>2</sub>NO<sub>2</sub> (V) and 6 g. paraformaldehyde in 20 ml. Et<sub>2</sub>O was added dropwise, keeping temp. below 10°. After 2-3 days the semisolid was neutralized with 50% H<sub>2</sub>SO<sub>4</sub>, extd. with Et<sub>2</sub>O, and distd. to remove CH<sub>2</sub>O and V and to sep. MeCH(OH)CH(NO<sub>2</sub>)CH<sub>2</sub>OH, b.p. 104-7°, d<sub>4</sub><sup>20</sup> 1.2120, n<sub>D</sub><sup>20</sup> 1.4640; p-nitrobenzoate m. 180-80°; diacetate (VI) b.p. 197-8°, d<sub>4</sub><sup>20</sup> 1.2180, n<sub>D</sub><sup>20</sup> 1.4485. Dehydration of VI over Na<sub>2</sub>CO<sub>3</sub> or phthalic anhydride and P<sub>2</sub>O<sub>5</sub> gave AcO- $CH_2C(NO_2)CHMe$ , b. 179-81°, n<sub>D</sub><sup>20</sup> 1.4390.  
G. H. Meguerian

9/6  
11

NIKOLINSKI (2)

Distr: 482c(3)

Vulcanization retarders and regulators. P. Nikolinski and M. Kostova. *Godisnik Khim.-Tehnik. 78: 3, 1976, p. 125-28 (1976) (Russian summary 18), German summary 100-1).*—Additives used in vulcanization of rubber are reviewed (25 references) and several were tested. Tallow oil, phenyl-PCMO and carbonite-PCMO resins, and phosphonic acid were mild inhibitors. G. H. Megawana—

act  
///  
js

4  
299 (10) (May)

COUNTRY : U.S.S.R.  
CATEGORY : High Molecular Chemistry  
ABS. JOUR. : RZhkhim, No. 1 1960, No. 2, 97  
AUTHOR : Vinkel'ski, P.; Mladonov, I.  
INST. : Chemical-Technological Institute  
TITLE : On the Stabilization of Chloroprene and Its  
Polymers. I. Classification of Inhibitors and  
Action of Oxides of Nitrogen upon Chloroprene\*  
ORIG. PUB. : Godisnik Khim.-tekhnol. inst, 1957 (1958),  
4, No 1, 55-57, 65-70, 81-94  
ABSTRACT : I. Depending on the type of the functional  
inhibitory group (FIG) (but not on the type of  
the carrier of FIG), which determines the prop-  
erties of the inhibitor (I), all I are dis-  
\*and Divinyl Acetylene. II. Compounds of Chloro-  
prene with Nitrogen Dioxide. III. On the In-  
hibiting Action of 1,4-dinitro-2-chlorobutene  
and on the Mechanism of Inhibition

CARD: 1/3

CARD: 2/3

COUNTRY :  
CITY :

ABS. JOUR. : RZhim., No. 1 1960, No. 3497

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : solution, from which, by chromatography on  
cont'd silica gel, 2 isomers of dinitrochlorobutene,  
viz., 1,3-dinitro-3-chlorobutene-3 ( $n_D^{20}$  1.5075)  
and 1,4-dinitro-2-chlorobutene-2 (II) ( $n_D^{20}$   
1.5180), were separated. The structure of the  
isomers was established by ozonization. The  
products of decomposition of the ozonide of  
1,3-dinitro-3-chlorobutene-3 are formic acid  
and  $\text{sym-NO}_2\text{CH}_2\text{CH}_2\text{NO}_2$ , which forms upon the

CARD: 4/6

I-4

NIKOLIMSKI, P.

"Brief review of the development of synthetic rubber."

p.7 (Tekhnika, Vol. 6, no. 9, 1957, Sofia, Bulgaria)

Monthly Index of East European Accessions (KEAI( LC, Vol. 7, No. 8, August 1958



LAMBIEV, Kh.; NIKOLINSKI, P.; MLADENOV, Iv.; KONSTANTINOVA, Kl.

On the behavior of hydrogenated thallium oil in rubber mixtures.  
Gosichnik khim tekhn 6 no.1145-62 '59 (Publ. '60)

NIKOLINSKI, P.; HLADENOV, I.; DRAMOV, S.; TEPKLIKIAN, M.

On obtaining nitroalcohol and nitrobutadiene. *Gedishnik khim tekhn* 6  
no.2:95-106 '59 (Publ. '60).

NIKOLINSKI, P.; BOIADZHIEVA, Ts.; KLADEKOV, Iv.; SHEPOLINI, R.

Uncovering certain organic acids in vulcanised rubber by paper chromatography. *Godishnik khim tekhn* 7 no.1/2:37-40 '60 [publ. '61].

MLADENOV, Iv.; NIKOLINSKI, P.; VELCHEVA, I.

Possibility of using the Dimitrograd bentonite as the active filler  
of the 1-4-v sponges on the basis of T-revertex and standard revertex.  
Gadishnik khim tekhn 7 no.1/2:241-250 '60 [publ. '61].

B/007/62/000/002/009/012  
D205/D307

**AUTHORS:** Nikolinski, P. and Mladenov, I.

**TITLE:** The preparation of filler-free chlorinated rubber from vulcanization waste

**PERIODICAL:** Referativnyy byulleten' Bolgarskoy nauchnoy literatury, Khimiya i khimicheskaya tekhnologiya, no. 2, 1962, 8, abstract 113, God.-khim.-tekhrol. inst., 7, 1960, book 1-2, 1961 (Dep. 1962), pp 251-258 (Rus. and Ger. summaries)

**TEXT:** Chlorinated rubber is produced by the chlorination of crumbed vulcanization wastes, suspended in  $\text{CCl}_4$ , in the presence of a halogen carrier, with chlorine passed through at an optimum velocity of 30-35 l/hr per liter of suspension. The chlorination is carried out at the b.p. of  $\text{CCl}_4$ ,  $76^\circ\text{C}$ , using a ratio of  $\text{CCl}_4$ : rubber of 20:1. The product contains most of the components of the rubber mixture, exerting an unfavorable effect on the quality of chlorinated rubber coatings. Removal of soot from the chloro-rubber

Card 1/2

The preparation of filler-free ...

B/007/62/000/002/009/012  
D205/D307

solution in  $CCl_4$  takes place by the precipitation of the petroleum fraction (b.p. 140-170°C) and heating to 40-60°C. Chloro-rubber is isolated from soot-free filtrate by steam-distilling off the  $CCl_4$ . The separated soot is re-activated by heating to 250-400°C. Varnishes prepared on the base of the chloro-rubber obtained need not be less than 30% plasticizer. (Sofia, Khimiko-tehnologicheskii institut (Sofia, Institute of Chemical Technology))  
[ Abstracter's note: Complete translation ]

Card 2/2

S/001/62/000/014/032/039  
B166/B144

**AUTHORS:** Mladenov, Iv., Nikolinski, P., Groshekov, P.  
**TITLE:** Enhancing the compatibility between natural rubber and  
CK(-30 (SMB-30)  
**PERIODICAL:** Referativnyy zhurnal. Khimiya, no. 14, 1962, 650, abstract  
14P354 (Kashi, obuvki, kauchuk, plastmasi, v. 2, no. 4,  
1961, 6 - 8)

**TEXT:** The pyrolysis product of old rubber from tires (density 0.9294,  
iodine number 116.0, Engler viscosity 1.86, boiling point 130°C,  
 $n_D^{20}$  1.5142) was oxidized by blowing air or O<sub>2</sub> through it at 130°C, and  
5 - 10% of this was introduced into a blend of MK (MK) and butadiene-  
styrene rubber (6 : 4) as a plasticizer. The physical and mechanical  
properties of such vulcanizates are better than those of vulcanizates  
containing stearic acid or unoxidized oil as the softener. The  
plasticizer which in least quantity gives the best physical and

Card 1/2

MEARNOV, Iv.; ABASOVA, Iord.; NIKOLINSKI, P.

Studies on the activity of the Bulgarian silica gel as a  
filler in rubber industry. *Godishnik khim tekhn* 8 no.2:63-71  
'61 [part '62].

MLADENOV, I.; NIKOLINSKI, P.

A possible increase in the compatibility between chloroprene and  
butadiene-styrene rubbers. Doklady RAN 14 no.5:483-485 '61.

1. Submitted by Academician B. Ivanov.

(Rubber)

B/007/62/000/002/010/012  
D205/D307

**AUTHORS:** Nikolinski, P., Mladenov, I. and Khodkevich, L.

**TITLE:** Preparation and properties of mixed polymers based on butadiene-nitrile and polysulfide rubber

**PERIODICAL:** Referativnyy byulleten' Bolgarskoy nauchnoy literatury, Khimiya i khimicheskaya tekhnologiya, no. 2, 1962, 8, abstract 114, Kozhi, obuvki, kauchuk, plastmasi, 3, 1962, book 1, pp 7-9 (Bulg., Rus. summaries)

**TEXT:** The authors prepared a mixed polymer from butadiene-nitrile rubber CKH -40 (SKN-40) and thiokol A (polycondensation product of dichloroethane with Na polysulfide) taken in the ratio of 3:1 without pre-purification from anti-ageing compounds and sulfur, by combined plasticization under nitrogen. During rolling for 40 min at roller temperatures of 20-60°C, 86% of thiokol combines with nitrile rubber. The mixed polymer dissolves to the extent of 98% in acetone at 20°C, over 24 hours. The adhesiveness of this product (on average 1800 g/cm) and stability w.r.t. solvents are better than  
Card 1/2

**NIKOLINSKI, P.; ABAZOVA, Iord.; MLADENOV, Iv.**

**Studies on the activity of the Bulgarian silica gel as a filler  
in rubber industries. Kozhi Sofia 3 no.6:7-9 '62.**

MLADENOV, I.; NIKOLINSKY, P. [Nikolinski, P.]; VASSILEVA, S.  
[Vassilva, S.]

Studying compatibility of certain caoutchoucs by selective  
inflating. Doklady BAN 16 no. 8: 837-840 '63.

1. Note presentee par D. Ivanoff [Ivanov, D.], membre de  
l'Academie, membre du Comite de redaction, "Doklady  
Bolgarskoy Akademii nauk. Comptes rendus de l'Academie  
bulgare des Sciences".

MIRNICH, P.

"Medical Experiences in the Yugoslav Liberation War, 1941-1945." p. 7.  
(Vojnosanitetski Pregled, Military-Medical Review, Vol. 10, no. 1/2, Jan/Feb. 1953,  
Belograd)

SO: Monthly List of East European Accessions. Vol. 3, no. 3. Library of Congress. March 1954  
Uncl.

WITKIN, A.; FINE, A.

Organization of national health during wars: coordination of civilian and military health services; peacetime preparations. p. 481.  
VOJNO-TEHNIČKI GLASNIK, Beograd.

Vol. 3, No. 7, July 1955

SOURCE: East European Accessions List. (EEAL), Library of Congress, Vol. 4, No. 12, December 1955

NIKOLIŠ , Gojka, Generalpotpukovnik dr; KRAUS . Zdenka, pukovnik dr.

National health organisation in war-time; the coordination of civilian and military health services; preparation for it during peace-time period. Arh.farm.Beograd 5 no.2-3:95-98 Apr-July '55.

1. Referat generalpotpukovnika dr Gojka Nikolisa i pukovnika dr. Zdenka Krausa, održan na XIV internacionalnom kongresu sa vojnu medicinu i farmaciju - Luksemburg, 1954 godine.

(MEDICINE, MILITARY AND NAVAL,

coordination of civilian & military health serv. in war-time and prep. in peace-time(Ser))

(MEDICINE

coordination with military health serv in war-time & prep. for during peace-time (Ser))

NIKOLIS, Gojko, generalpotpukovnik dr; KLAUS, Edenko, pukovnik dr (Beograd)

National organization of public health in war, coordination of military and civilian sanitary services, preparation during the peace time. Med.glasn.9 no.6:203-209 June '55.

1. Stav Sanitetske uprave JNA

(PUBLIC HEALTH,

in war time, cooperation of military & civilian authorities & prep.during peace time)

(WAR,

coordination of pub. health serv.with military authorities & prep. during peace time.

NIKOLIS, Gojko, General-ppuk.dr.; KRAJČIĆ, Zdenko, puk.dr., Beograd.

National health organization in war-time; the coordination of civilian and military health services; preparation in peace time. *Heroine straz. Beogr. II no.6; 197-198 '55.*

(NATIONAL HEALTH PROGRAM)

in Yugosl., peace-time prep. of war-time coordination of civilian & military health serv.(Ser)

(MEDICINE, MILITARY AND NAVAL,

peace-time prep. of war-time coordination of civilian & military health serv. in Yugosl.(Ser)

NAKODNO  
ZDRAVLJE

NIKOLIS, G.

Our experience during German Drvar landing on May 25, 1944. Voj.san.  
pregl. 16 no.5:515-517 My '61.

(MILITARY MEDICINE hist)